

REMARKS/ARGUMENTS

Claims 1-11 are pending in this application.

Claim 1 had been rejected under 35 U.S.C. § 103(a) over Kato et al. (U.S. Patent No. 6,021,137) in view of Hicks et al. (U.S. Patent No. 4,147,978). This rejection is respectfully traversed for the following reasons.

If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent.¹ The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of non-obviousness.²

The Federal Circuit has stated that “rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”³ “[T]o determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue . . . this analysis should be made explicit. . . . [A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. . . . [I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”⁴

Claim 1 comprises each slave unit using AC current to determine when each timing signal symbol is received.

¹ *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)

² *Manual of Patent Examining Procedure* § 2142 (8th ed. rev. 7 July 2008)

³ *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR International Co. v. Teleflex Inc.* [hereinafter *KSR*], 550 U.S. 398, 418, 82 USPQ2d 1385, 1396 (quoting Federal Circuit statement with approval)

⁴ *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396

The pending final Office Action (page 3) states that this element is disclosed in Kato, col. 13, line 65 – col. 14, line 5; except that instead of using AC current, Kato uses a spread signal superimposed on a power line.

The pending final Office Action (page 3) further states that while “Kato does not disclose an AC current”, Hicks discloses “transmitting an AC reference signal from an oscillator” and that the “AC oscillator as disclosed by Hicks can be implemented in the system of Kato” making Claim 1 (including its aforementioned element) obvious.

Applicants respectfully disagree.

The cited portion of Kato reads: “Then, the data collector 80 superimposes a spread signal on the power line 5 periodically or non-periodically according to the polling signal PS, and polling is executed to the groups G1 (terminal units 90, 100) and G2 (terminal units 110, 120) in batch. The terminal units 90 and 100 in the group G1 provide response signals A11 and A12 prepared in a common certain period of time t11 preset respectively to spread spectrum modulation and transmit the signals to the data collector 80 as spread signals respectively.”

Note that the slave units in Kato use the spread signal superimposed on a power line as the timing signal.

Contrary to what is stated in the pending final Office Action, Kato does not use a spread signal superimposed on a power line to determine when each timing signal symbol is received, because the spread signal superimposed on a power line in Kato is the timing signal.

In other words, in Claim 1, the AC current is used by slave units to determine when to receive a timing signal. However, in Kato, contrary to Claim 1, nothing is used by slave units to determine when to receive a timing signal (spread signal superimposed on a power line), except the timing signal itself.

Hicks discloses a circuit measuring the energy consumed in an AC system. Nothing is timed or synchronized using an AC current in Hicks.

So, neither Kato, nor Hicks use anything to determine when to receive a timing signal, contrary to Claim 1, where the AC current is used for this purpose.

Neither Kato, nor Hicks, alone or in combination, disclose each slave unit using AC current to determine when each timing signal symbol is received. Therefore, Claim 1 is non-obvious over Kato and Hicks under 35 U.S.C. § 103(a) and should be allowed.

Claims 2 and 6 had been rejected under 35 U.S.C. § 103(a) over Kato in view of Hicks. Claim 4 had been rejected under 35 U.S.C. § 103(a) over Kato and Hicks in view of Tanaka et al. (U.S. Patent No. 4,998,245). Claims 3, 5, and 7-11 had been rejected under 35 U.S.C. § 103(a) over Kato and Hicks in view of Lester et al. (U.S. Patent No. 6,784,790). These rejections are respectfully traversed for the following reasons.

If an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious.⁵

Claims 2-11 depend on Claim 1, which, as explained above, is non-obvious. Therefore, Claims 2-11 are patentable over Kato, Hicks, Tanaka, and Lester under 35 U.S.C. § 103(a) and should be allowed.

It is believed that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited in this case. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

HOUSTON ELISEEVA LLP

By /Maria M. Eliseeva/
Maria M. Eliseeva

⁵ In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

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Registration No.: 43,328
Tel.: 781 863 9991
Fax: 781 863 9931

4 Militia Drive, Suite 4
Lexington, Massachusetts 02421-4705
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